WHAT IS CLAIMED IS:

1. A method for enhancing the complexation efficiency of a benzodiazepine with a cyclodextrin, said method comprising complexing said benzodiazepine with β-cyclodextrin sulfobutyl ether in an aqueous medium at a pH level below about 5 and allowing the resultant complexation medium to equilibrate for sufficient time to effect chemically reversible ring-opening of at least 1% by weight of said benzodiazepine.

2. A method according to Claim 1, comprising complexing said benzodiazepine with β-cyclodextrin sulfobutyl ether in an aqueous medium at a pH level below about 5 and allowing the resultant complexation medium to equilibrate for sufficient time to effect chemically reversible ring-opening of at least 5% by weight of said benzodiazepine.

3. A method according to Claim 1, comprising complexing said benzodiazepine with β-cyclodextrin sulfobutyl ether in an aqueous medium at a pH level below about 5 and allowing the resultant complexation medium to equilibrate for sufficient time to effect chemically reversible ring-opening of 50% or more by weight of said benzodiazepine.

4. A method according to Claim 1, wherein the benzodiazepine is alprazolam, brotizolam, chlordiazepoxide, clobazam, clonazepam, clorazepam, demoxazepam, flumazenil, flurazepam, halazepam, midazolam, nordazepam, medazepam, diazepam, nitrazepam, oxazepam, midazepam, lorazepam, prazepam, quazepam, triazolam, temazepam or loprazolam.

5. A method according to Claim 4, further comprising formulating the cyclodextrin-benzodiazepine complex thus obtained as a nasal spray, sublingual tablet or parenteral solution.

6. A method according to Claim 1, wherein the complexation is conducted at a pH level between about 3 and about 5.

7. A method for enhancing the availability of a benzodiazepine following administration of a cyclodextrin-benzodiazepine complex to a warm-blooded animal in need of same, said method comprising complexing said benzodiazepine with β-cyclodextrin sulfobutyl ether in an aqueous medium at a pH level below about 5 and allowing the resultant complexation medium to equilibrate for sufficient time to effect chemically reversible ring-opening of at least 1% by weight of said benzodiazepine to enhance complexation efficiency, further comprising administering the cyclodextrin-benzodiazepine complex thus obtained to said animal.

8. A method according to Claim 7, comprising complexing said benzodiazepine with β-cyclodextrin sulfobutyl ether in an aqueous medium at a pH below about 5 and allowing the resultant complexation medium to equilibrate for sufficient time to effect chemically reversible ring-opening of at least 5% by weight of said benzodiazepine to enhance complexation efficiency, further comprising administering the cyclodextrin-benzodiazepine complex thus obtained to said animal.

9. A method according to Claim 7, comprising complexing said benzodiazepine with β-cyclodextrin sulfobutyl ether in an aqueous medium at a pH level below about 5 and allowing the resultant complexation medium to equilibrate

for sufficient time to effect chemically reversible ring-opening of 50% or more by weight of said benzodiazepine to enhance complexation efficiency, further comprising administering the cyclodextrin-benzodiazepine complex thus obtained to said animal.

10. A method according to Claim 7, wherein the benzodiazepine is alprazolam, brotizolam, chlordiazepoxide, clobazam, clonazepam, clorazepam, demoxazepam, flumazenil, flurazepam, halazepam, midazolam, nordazepam, medazepam, diazepam, nitrazepam, oxazepam, midazepam, lorazepam, prazepam, quazepam, triazolam, temazepam or loprazolam.

11. A method according to Claim 10, further comprising formulating the cyclodextrin-benzodiazepine complex thus obtained as a nasal spray, sublingual tablet or parenteral solution.

12. A method according to Claim 11, further comprising administering the nasal spray, sublingual tablet or parenteral solution in an amount effective to produce a sedative, anti-anxiety, anticonvulsant or muscle relaxant effect.

13. A method according to Claim 12, further comprising administering the nasal spray, sublingual tablet or parenteral solution as a pre-anaesthetic medication, or to supplement anaesthesia, to induce and maintain anaesthesia or to induce a hypnotic effect.

14. A method according to Claim 13, wherein the benzodiazepine is alprazolam, clonazepam, lorazepam, midazolam or triazolam.

15. A method according Claim 14, wherein the complexation is conducted at a pH level between about 3 and about 5.

16. A method according to Claim 7, further comprising formulating the cyclodextrin-benzodiazepine complex thus obtained as an aqueous solution or a hydrogel.

17. A method according to Claim 16, further comprising administering the cyclodextrin-benzodiazepine complex as a nasal spray or nasal drops.

18. A method according to Claim 16, further comprising administering the cyclodextrin-benzodiazepine complex as a parenteral solution.

19. A method according to Claim 16, wherein said benzodiazepine is selected from the group consisting of midazolam, alprazolam, clonazepam, lorazepam and triazolam and wherein the cyclodextrin-drug complex is formulated as an aqueous solution.

20. A method according to Claim 19, further comprising formulating the aqueous solution to be at a pH level of below about 4.7 and administering it as a nasal spray.

21. A method according to Claim 20, wherein the pH level of the nasal spray is between about 3 and about 4.7.

22. A method according to Claim 7, further comprising formulating the cyclodextrin-benzodiazepine complex thus obtained for dermal administration.

23. A method according to Claim 7, further comprising formulating the cyclodextrin-benzodiazepine complex thus obtained as a solid.

24. A method according to Claim 23, wherein the solid cyclodextrin-benzodiazepine complex is formulated as a tablet for oral, buccal or sublingual administration.

25. A method for enhancing the availability of a benzodiazepine following administration of a cyclodextrin-benzodiazepine complex to a warm-blooded animal in need of same, said method comprising complexing said benzodiazepine with β-cyclodextrin sulfobutyl ether in an aqueous medium at a pH level below about 5 and allowing the resultant complexation medium to equilibrate for sufficient time to effect chemically reversible ring-opening of at least 1% by weight of said benzodiazepine to enhance the complexation efficiency, removing the water from the aqueous complexation medium after formation of the cyclodextrin-benzodiazepine complex, and administering the cyclodextrin-benzodiazepine complex thus obtained to said animal.

26. A method according to Claim 25, comprising complexing said benzodiazepine with β-cyclodextrin sulfobutyl ether in an aqueous medium at a pH level below about 5 and allowing the resultant complexation medium to equilibrate for sufficient time to effect chemically reversible ring-opening of at least 5% by weight of said benzodiazepine to enhance the complexation efficiency, removing the water from the aqueous complexation medium after formation of the cyclodextrin-benzodiazepine complex, and administering the cyclodextrin-benzodiazepine complex thus obtained to said animal.

27. A method according to Claim 25, wherein the benzodiazepine is alprazolam, brotizolam, chlordiazepoxide, clobazam, clonazepam, clorazepam, demoxazepam, flumazenil, flurazepam, halazepam, midazolam, nordazepam, medazepam, diazepam, nitrazepam, oxazepam, midazepam, lorazepam, prazepam, quazepam, triazolam, temazepam or loprazolam.

28. A method according to Claim 25, wherein the benzodiazepine is midazolam, alprazolam, clonazepam, lorazepam or triazolam.

29. A method according to Claim 7, further comprising complexing said benzodiazepine with β-cyclodextrin sulfobutyl ether in the presence of from about 0.001 to about 5% (weight/volume) of a pharmacologically inactive, pharmaceutically acceptable water-soluble polymer at a temperature of from about 30°C to about 150°C.

30. A method according to Claim 29, wherein the polymer is a cellulose derivative or a polyvinyl polymer.

31. A method according to Claim 30, wherein the polymer is methylcellulose, hydroxyethyl cellulose, hydroxypropyl cellulose, hydroxypropyl methylcellulose, hydroxyethyl methylcellulose, hydroxypropyl ethylcellulose, hydroxyethyl ethylcellulose, sodium carboxymethylcellulose or polyvinylpyrrolidone.

32. A method according to Claim 31, wherein the cellulose derivative is hydroxypropyl methylcellulose.

33. A method according to Claim 7, further comprising complexing said benzodiazepine with β-cyclodextrin sulfobutyl ether in the presence of at least one member selected from the group consisting of acetic acid and its pharmaceutically acceptable salts, the acetate-water ratio of the aqueous complexation medium being from about 1:1000 to about 2:1.

34. A method according to Claim 33, wherein the benzodiazepine is midazolam.

35. A method according to Claim 7, further comprising complexing said benzodiazepine with β-cyclodextrin sulfobutyl ether in the presence of from about 0.001 to about 5% (weight/volume) of a pharmacologically inactive, pharmaceutically acceptable water-soluble polymer at a temperature of from about 30°C to about 150°C, and further in the presence of at least one member selected from the group consisting of acetic acid and its pharmaceutically acceptable salts, the acetate-water ratio of the aqueous complexation medium being from about 1:1000 to about 2:1.

36. A method according to Claim 35, wherein the benzodiazepine is midazolam.

37. An inclusion complex of a benzodiazepine with β-cyclodextrin sulfobutyl ether, at least 50% by weight of said benzodiazepine being in ring-opened form.

38. An inclusion complex according to Claim 37, wherein the benzodiazepine is alprazolam, brotizolam, chlordiazepoxide, clobazam, clonazepam, clorazepam, demoxazepam, flumazenil, flurazepam, halazepam,

midazolam, nordazepam, medazepam, diazepam, nitrazepam, oxazepam, midazepam, lorazepam, prazepam, quazepam, triazolam, temezepam or loprazolam.

39. An inclusion complex according to Claim 37, wherein the benzodiazepine is midazolam.

40. A pharmaceutical composition comprising an inclusion complex of a benzodiazepine with β-cyclodextrin sulfobutyl ether, at least 50% by weight of said benzodiazepine being in ring-opened form, said complex being in an amount effective to produce a sedative, anti-anxiety, anticonvulsant or muscle relaxant effect, and a pharmaceutically acceptable carrier therefor suitable for nasal, oral, sublingual, buccal, parenteral or dermal administration.

41. A pharmaceutical composition according to Claim 40, formulated as an aqueous solution.

42. A pharmaceutical composition according to Claim 40, in the form of a nasal spray or nasal drops.

43. A pharmaceutical composition according to Claim 40, wherein the benzodiazepine is alprazolam, brotizolam, chlordiazepoxide, clobazam, clonazepam, clorazepam, demoxazepam, flumazenil, flurazepam, halazepam, midazolam, nordazepam, medazepam, diazepam, nitrazepam, oxazepam, midazepam, lorazepam, prazepam, quazepam, triazolam, temazepam or loprazolam.

44. A pharmaceutical composition according to Claim 40, wherein the benzodiazepine is midazolam.

45. A method for enhancing the complexation efficiency of a benzodiazepine with a cyclodextrin, said method comprising complexing said benzodiazepine with a cyclodextrin selected from the group consisting of α-cyclodextrin, β-cyclodextrin, γ-cyclodextrin, methylated α-cyclodextrin, methylated β-cyclodextrin, methylated γ-cyclodextrin, hydroxypropyl-α-cyclodextrin, hydroxypropyl-β-cyclodextrin, hydroxypropyl-γ-cyclodextrin, maltosyl-α-cyclodextrin, maltosyl-β-cyclodextrin, maltosyl-γ-cyclodextrin, β-cyclodextrin sulfobutyl ether, hydroxyethyl-β-cyclodextrin, hydroxyethyl-γ-cyclodextrin, α-cyclodextrin carboxymethyl ether, β-cyclodextrin carboxymethyl ether and γ-cyclodextrin carboxymethyl ether, in an aqueous medium at a pH level below about 5 and allowing the resultant complexation medium to equilibrate for sufficient time to effect chemically reversible ring-opening of at least 1% by weight of said benzodiazepine, further comprising detecting the presence of the ring-opened form of said benzodiazepine.

46. A method for enhancing the complexation efficiency of a benzodiazepine with a cyclodextrin, said method comprising complexing said benzodiazepine with a cyclodextrin selected from the group consisting of α-cyclodextrin, β-cyclodextrin, γ-cyclodextrin, methylated α-cyclodextrin, methylated β-cyclodextrin, methylated γ-cyclodextrin, hydroxypropyl-α-cyclodextrin, hydroxypropyl-β-cyclodextrin, hydroxypropyl-γ-cyclodextrin, maltosyl-α-cyclodextrin, maltosyl-β-cyclodextrin, maltosyl-γ-cyclodextrin, β-cyclodextrin sulfobutyl ether, hydroxyethyl-β-cyclodextrin, hydroxyethyl-γ-cyclodextrin, α-cyclodextrin carboxymethyl ether, β-cyclodextrin carboxymethyl ether and γ-cyclodextrin carboxymethyl ether, in an aqueous

medium at a pH level below about 5 and allowing the resultant complexation medium to equilibrate for sufficient time to effect chemically reversible ring-opening of about 50% or more by weight of said benzodiazepine.

47. A method for enhancing the availability of a benzodiazepine following administration of a cyclodextrin-benzodiazepine complex to a warm-blooded animal in need of same, said method comprising complexing said benzodiazepine with a cyclodextrin selected from the group consisting of α-cyclodextrin, β-cyclodextrin, γ-cyclodextrin, methylated α-cyclodextrin, methylated β-cyclodextrin, methylated γ-cyclodextrin, hydroxypropyl-α-cyclodextrin, hydroxypropyl-β-cyclodextrin, hydroxypropyl-γ-cyclodextrin, maltosyl-α-cyclodextrin, maltosyl-β-cyclodextrin, maltosyl-γ-cyclodextrin, β-cyclodextrin sulfobutyl ether, hydroxyethyl-β-cyclodextrin, hydroxyethyl-γ-cyclodextrin, α-cyclodextrin carboxymethyl ether, β-cyclodextrin carboxymethyl ether and γ-cyclodextrin carboxymethyl ether, in an aqueous medium at a pH level below about 5 and allowing the resultant complexation medium to equilibrate for sufficient time to effect chemically reversible ring-opening of at least 1% by weight of said benzodiazepine to enhance the complexation efficiency, further comprising formulating the cyclodextrin-benzodiazepine complex thus obtained into a form suitable for administration to said animal, raising the pH level with base to above the pH level for the complexation, and administering said form.

48. A method for enhancing the availability of a benzodiazepine following administration of a cyclodextrin-benzodiazepine complex to a warm-blooded animal in need of same, said method comprising complexing said benzodiazepine with a cyclodextrin selected from the group consisting of α-cyclodextrin, β-cyclodextrin, γ-cyclodextrin, methylated α-cyclodextrin,

methylated β-cyclodextrin, methylated γ-cyclodextrin, hydroxypropyl-α-cyclodextrin, hydroxypropyl-β-cyclodextrin, hydroxypropyl-γ-cyclodextrin, maltosyl-α-cyclodextrin, maltosyl-β-cyclodextrin, maltosyl-γ-cyclodextrin, β-cyclodextrin sulfobutyl ether, hydroxyethyl-β-cyclodextrin, hydroxyethyl-γ-cyclodextrin, α-cyclodextrin carboxymethyl ether, β-cyclodextrin carboxymethyl ether and γ-cyclodextrin carboxymethyl ether, in an aqueous medium at a pH level below about 5 and allowing the resultant complexation medium to equilibrate for sufficient time to effect chemically reversible ring-opening of at least 1% by weight of said benzodiazepine to enhance the complexation efficiency, further comprising detecting the presence of the ring-opened form of said benzodiazepine, and administering the cyclodextrin-benzodiazepine complex thus obtained to said animal.

49. A method for enhancing the availability of a benzodiazepine following administration of a cyclodextrin-benzodiazepine complex to a warm-blooded animal in need of same, said method comprising complexing said benzodiazepine with a cyclodextrin selected from the group consisting of α-cyclodextrin, β-cyclodextrin, γ-cyclodextrin, methylated α-cyclodextrin, methylated β-cyclodextrin, methylated γ-cyclodextrin, hydroxypropyl-α-cyclodextrin, hydroxypropyl-β-cyclodextrin, hydroxypropyl-γ-cyclodextrin, maltosyl-α-cyclodextrin, maltosyl-β-cyclodextrin, maltosyl-γ-cyclodextrin, β-cyclodextrin sulfobutyl ether, hydroxyethyl-β-cyclodextrin, hydroxyethyl-γ-cyclodextrin, α-cyclodextrin carboxymethyl ether, β-cyclodextrin carboxymethyl ether and γ-cyclodextrin carboxymethyl ether, in an aqueous medium at a pH level below about 5 and allowing the resultant complexation medium to equilibrate for sufficient time to effect chemically reversible ring-opening of about 50% or more by weight of said benzodiazepine to enhance the

complexation efficiency, further comprising administering the cyclodextrin-benzodiazepine complex thus obtained to said animal.

50. A method according to Claim 45, wherein the benzodiazepine is alprazolam, brotizolam, chlordiazepoxide, clobazam, clonazepam, clorazepam, demoxazepam, flumazenil, flurazepam, halazepam, midazolam, nordazepam, medazepam, diazepam, nitrazepam, oxazepam, midazepam, lorazepam, prazepam, quazepam, triazolam, temazepam or loprazolam.

51. A method according to Claim 47, wherein the benzodiazepine is alprazolam, brotizolam, chlordiazepoxide, clobazam, clonazepam, clorazepam, demoxazepam, flumazenil, flurazepam, halazepam, midazolam, nordazepam, medazepam, diazepam, nitrazepam, oxazepam, midazepam, lorazepam, prazepam, quazepam, triazolam, temezepam or loprazolam.

52. A method according to Claim 45, wherein the benzodiazepine is complexed with hydroxypropyl-β-cyclodextrin, β-cyclodextrin sulfobutyl ether, β-cyclodextrin, γ-cyclodextrin or hydroxypropyl-γ-cyclodextrin.

53. A method according to Claim 47, wherein the benzodiazepine is complexed with hydroxypropyl-β-cyclodextrin, β-cyclodextrin sulfobutyl ether, β-cyclodextrin, γ-cyclodextrin or hydroxypropyl-γ-cyclodextrin.

54. A method according to Claim 45, wherein the complexation is conducted at a pH level between about 3 and about 5.

55. A method according to Claim 47, wherein the complexation is conducted at a pH level between about 3 and about 5.

56. A method according to Claim 47, further comprising formulating the cyclodextrin-benzodiazepine complex thus obtained as an aqueous solution or a hydrogel.

57. A method according to Claim 47, wherein said benzodiazepine is selected from the group consisting of midazolam, alprazolam, clonazepam, lorazepam and triazolam and further comprising formulating the cyclodextrin-drug complex thus obtained as an aqueous solution.

58. A method according to Claim 57, further comprising formulating the aqueous solution to be at a pH level of below about 4.7 and administering it as a nasal spray.

59. A method according to Claim 58, wherein the pH level of the nasal spray is between about 3 and about 4.7.

60. A method according to Claim 47, further comprising complexing said benzodiazepine with said cyclodextrin in the presence of from about 0.001 to about 5% (weight/volume) of a pharmacologically inactive, pharmaceutically acceptable water-soluble polymer at a temperature of from about 30°C to about 150°C.

61. A method according to Claim 48, further comprising complexing said benzodiazepine with said cyclodextrin in the presence of from about 0.001 to about 5% (weight/volume) of a pharmacologically inactive, pharmaceutically acceptable water-soluble polymer at a temperature of from about 30°C to about 150°C.

62. A method according to Claim 49, further comprising complexing said benzodiazepine with said cyclodextrin in the presence of from about 0.001 to about 5% (weight/volume) of a pharmacologically inactive, pharmaceutically acceptable water-soluble polymer at a temperature of from about 30°C to about 150°C.

63. A method for enhancing the availability of a benzodiazepine following administration of a cyclodextrin-benzodiazepine complex to a warm-blooded animal in need of same, said method comprising complexing said benzodiazepine with β-cyclodextrin sulfobutyl ether in an aqueous medium at a pH level below about 5 and allowing the resultant complexation medium to equilibrate for sufficient time to effect chemically reversible ring-opening of 50% or more by weight of said benzodiazepine to enhance the complexation efficiency, removing the water from the aqueous complexation medium after formation of the cyclodextrin-benzodiazepine complex, and administering the cyclodextrin-benzodiazepine complex thus obtained to said animal.

64. A method according to Claim 63, wherein the benzodiazepine is alprazolam, brotizolam, chlordiazepoxide, clobazam, clonazepam, clorazepam, demoxazepam, flumazenil, flurazepam, halazepam, midazolam, nordazepam, medazepam, diazepam, nitrazepam, oxazepam, midazepam, lorazepam, prazepam, quazepam, triazolam, temazepam or loprazolam.

65. A method according to Claim 63, wherein the benzodiazepine is midazolam, alprazolam, clonazepam, lorazepam or triazolam.